

ATAAGTATG TTTAGCCCTC ATGTCACATG AACCTTTATG CATTGAAGAT	50
TGTTTCCCTT GCCCCCCCAG GGGGTGGGGT TATTTTCTA TCCTTGTTAA	100
CTTCCCTATA TTATTATATA CACTTTGAGT TTTAGGGTAC ATGTGCACAA	150
AGTGCAGGTT AGTTACATAT GTATACATGT GCCATGTTGG TGTGCTGCAC	200
CCATTAACAC ATCATTTAGC ATGAGGTATA TCTCCTAATG TTATCCCTCC	250
CCCCTCCCC CACCCACAA CAGTCCCCGG AGTGTGATAT TCCCCTTTCC	300
TGTGTCCATG TGTTATTATT CCAATTCCCC ACCTATGAAG TGAAAATATG	350
CAGGTGTTTG GATTTTGTG CTTGGCAATA GTTTTGCTGA GAATGATGGT	400
TTCCAGCTTC ATCCATGTCC CTACAAAGGA CATGAACTCA TCATTTTTTA	450
TGACTGCATA GTATTCTATG GTGTATACAT GCCAACTTTT CTCCCCCCCC	500
TTTTTAAGCT CTTCTTTCA CTGGCTTTCA TGATCCCACC AATTCCTGCT	550
TTTCCTTTT TGTTTTTTT TTCCAACAGA ATGGTTATGG TTAACTCAG	600
CAGAATTTGT TGAACAATA CGACATGCTG GGGATCATGG CATGGAATGC	650
M L G I M A W N A	
AACTTGCAAA AACTGGCTGG CAGCAGAGGC TGCCCTGGAA AAGTACTACC	700
T C K N W L A A E A A L E K Y Y L	
I	
TTTCCATTTT TTATGGGATT GAGTTCGTTG TGGGAGTCCT TGGAATACC	750
S I F Y G I E F V V G V L G N T	
ATTGTTGTTT ACGGCTACAT CTTCTCTCTG AAGAACTGGA ACAGCAGTAA	800
I V V Y G Y I F S L K N W N S S N	
II	
TATTTATCTC TTAACTCT CTGTCTCTGA CTTAGCTTTT CTGTGCACCC	850
I Y L F N L S V S D L A F L C T L	
TCCCATGCT GATAAGGAGT TATGCCAATG GAACTGGAT ATATGGAGAC	900
P M L I R S Y A N G N W I Y G D	
GTGCTCTGCA TAAGCAACCG ATATGTGCTT CATGCCAACC TCTATACCAG	950
V L C I S N R Y V L H A N L Y T S	

FIG. 1A

III
CATTCTCTTT CTCACCTTTTA TCAGCATAGA TCGATACTTG ATAATTAAGT 1000
I L F L T F I S I D R Y L I I K Y

ATCCTTTCCG AGAACACCTT CTGCAAAAGA AAGAGTTTGC TATTTTAATC 1050
P F R E H L L Q K K E F A I L I

IV
TCCTTGGCCA TTTGGGTTTT AGTAACCTTA GAGTTACTAC CCATACTTCC 1100
S L A I W V L V T L E L L P I L P

CCTTATAAAT CCTGTTATAA CTGACAATGG CACCACCTGT AATGATTTTG 1150
L I N P V I T D N G T T C N D F A

CAAGTTCTGG AGACCCCAAC TACAACCTCA TTTACAGCAT GTGTCTAACA 1200
S S G D P N Y N L I Y S M C L T

V
CTGTTGGGGT TCCTTATTCC TCTTTTGTG ATGTGTTTCT TTTATTACAA 1250
L L G F L I P L F V M C F F Y Y K

GATTGCTCTC TTCCTAAAGC AGAGGAATAG GCAGGTTGCT ACTGCTCTGC 1300
I A L F L K Q R N R Q V A T A L P

CCCTTGAAAA GCCTCTCAAC TTGGTCATCA TGGCAGTGGT AATCTTCTCT 1350
L E K P L N L V I M A V V I F S

VI
GTGCTTTTTA CACCCTATCA CGTCATGCGG AATGTGAGGA TCGCTTCACG 1400
V L F T P Y H V M R N V R I A S R

CCTGGGGAGT TGGAAGCAGT ATCAGTGCAC TCAGGTCGTC ATCAACTCCT 1450
L G S W K Q Y Q C T Q V V I N S F

VII
TTTACATTGT GACACGGGCT TTGGGCTTTC TGAACAGTGT CATCAACCCT 1500
Y I V T R A L G F L N S V I N P

GTCTTCTATT TTCTTTTGGG AGATCACTTC AGGGACATGC TGATGAATCA 1550
V F Y F L L G D H F R D M L M N Q

ACTGAGACAC AACTTCAAAT CCCTTACATC CTTTAGCAGA TGGGCTCATG 1600
L R H N F K S L T S F S R W A H E

AACTCCTACT TTCATTGAGA GAAAAGTGAG GGGCTTGTGA AACAGATTGT 1650
L L L S F R E K

TCTACAGATG AATCTGTAAG CCAGTTACAG TTTGCTTTAA CTCATAGACA 1700

TCAATCAGAG AGTGTACAG ATTTAACCTT GATCTAAAGA CAAGTTGTAC 1750

FIG. 1B

CCAGAGTATG TGAAAAGAAT GGGACGACAA GAATGTACTG GTTCTTCCT 1800
CTAAGAATTG AAAGGAGTTG AACTGCCTTA TGTTTGGGCA TGTA ACTCCA 1850
AAATACTAGG TAGTATAAGG CTTTCTCAAT CAGTCCCCAA ATGGAAGATA 1900
TATAAAGCAA CAAGTTGTCT GCATTTGATC ACTGGTCAGA TTGTAAAAAA 1950
AAAAAAAAAA AAGGGCGNCC GCCACCGCGG TGGAGCTCCA ATCGCC 1996

FIG. 1C

hup2U1	AADE---	-----	---GPNDIIN	GTWDGDELGY	RCRFNE--DFK	32
bovp2Y1	TEVWPAPV	NGDTAFLAD	PGSPMGNSTV	TSTAASVSPF	KCALTKTGFO	50
hup2U2	MLGI---	-----	---ALNAACK	NWLAAEA---	--ALEK----	23
hup2U1	YVLEPVSVGV	VCVGLCLCNA	VGLYIFLCRL	KLNASTTVM	EFPAVSADALY	82
bovp2Y1	FYYLPAVMIL	VFTIGFLGNS	VAIMFVFHM	KPMISGISVM	ENLALADFLY	100
hup2U2	-YYLSIFVGI	EFVGVGLGNT	AVVGYIFSL	KLNSSNIML	ENLSVSDLAF	72
hup2U1	AASPLLVVY	MARGDHMPFS	TVLCKLVRFEL	FYTNYCSIL	ELCISVHRC	132
bovp2Y1	VLTLPALTFY	MFNKTDWIFG	DAMCKLQRFI	FHVNYGCSIL	ELCISAHRY	150
hup2U2	LCLEPMLEHRS	MAN-GNNIYG	DVLCISNRVY	LHANLYISIL	ELFISIDRY	121
hup2U1	LGVLRPLRSL	RWGRARYARR	VAGAVVVLML	ACQAPVLYFV	TTSAR--GPL	180
bovp2Y1	SGAVYPLKSL	GRLKKKNNAVY	TSVLMVLIIV	VGISPTIFYS	GTGIRKNKTI	200
hup2U2	LITKYDFERH	LLQKKEFAL	ISLAIMVMT	LELLPTPLI	NPVI-TDNGT	170
hup2U1	TCHEITSAPEL	FSRFVATSSV	MLGLLEAVDF	AVILVCYVLM	ARRLLKPAYG	230
bovp2Y1	TCYDITSSDEY	LRSYFITYSMC	TTVAMECVDF	-LVLI-LGCY	GL-IVRALIY	246
hup2U2	TCNDFASSGD	PNYNLIYSMC	LTLLGELLE	-LFVMCFFYY	KIALFLKQRN	218
hup2U1	TSGGLPRAKR	KSVRTAVVL	AVFALCFLDF	HVTRTLYYSF	R---SLDLSG	277
bovp2Y1	KDLDNSPLRR	KSIYLVIIVL	TVFAVSYIDF	HVMKTMNLRA	RLDFOQTPEMC	296
hup2U2	RQVATALPLE	KPLNLMIMAV	VIESVLFIDY	HVMRNVRIAS	BLGSWKQYQC	268
hup2U1	HTLNAINMAY	KVTR-LASAN	SCLDPAVLYFL	AGRLVRFAR	DAKPPTGPSP	326
bovp2Y1	AFNDRVYATY	QVTRGCLASLN	SCVDPILLYFL	AGDTERRRLS	RATRKASRRS	346
hup2U2	T-QVVINSFY	IVTRALGFLN	SVINPWFYEL	LGDHFRDMLM	NQLRHNFK-S	316
hup2U1	ATPARRTLGL	RRSDRTDMQR	IGDVLGSSSE	SRRTSTPAG	SENTKDRL	375
bovp2Y1	EAL---NLQ-	SKSE--DM--	TLNILEFKO N	-----	----GDTSL	373
hup2U2	LE-----SFS-	RWAH--EL--	---LS-FRE KX	-----	-----	335

FIG. 2

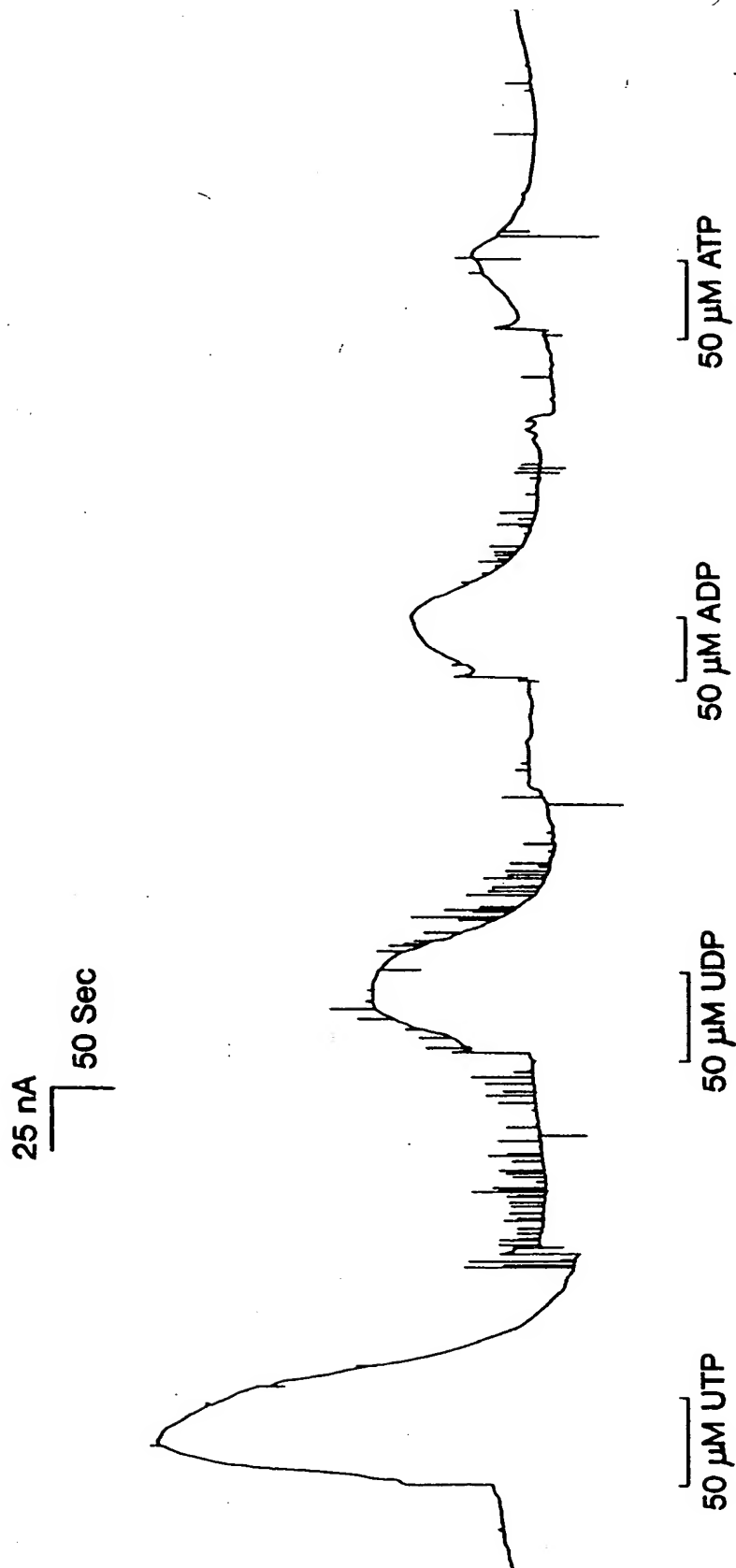


FIG. 3